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(54) Title: USE SINGLE NUCLEOTIDE POLYMORPHISM IN THE CODING REGION OF THE PORCINE LEPTIN RECEPTOR GENE TO ENHANCE PORK PRODUCTION

GA C T G T T G A G G C A C T T G G A A A G T T A A T T A T T G T G G A G A C T G C A T G T T T A A T C T T A G A
T A C T T C C T A T T T A T G T C T T A G T C A A A A T G A T T A A T T G C T T T C T A T G T G C T T T A A T G T C C T
A A C A G A A T T T T A T G T G A T A A C T G C A T T T G A C T T G
E F I Y V I T A F D L
G C A T A T C C A A T T A C T C C T T G G A A A T T T A A G T T G T C T T G C A T G C T T G C C A
A Y P I T P W K F K L S C M P
C C A A A T A C A A C A T A T G A C T T C C T T G C T G C T G G A A T C T C A A A G
P N T T Y D F L L P A G I S K
A A C A C T T C A A C T T T G A A T G G A C A T G A T G A G G C A G T T G T T G A A
N T S T L N G H D E A V V E
A [T/C] G G A A C T T A A T [T/A] [C/T] A A G T G G T A C C T A C T T T A T C A A A C
M/T E L N S/I S G T Y L S N
T T A T C T T C T A A A A C A A C T T T C C A C T G T G T C T T T G G A G T G A G G A A
L S S K T T F H C C F W S E E
G A T A A A A A C T G C T C T G T A C A T G C A G A C A A C A T T G C A G G G A A G G
D K N C S V H A D N I A G K

(57) Abstract: The instant invention is drawn to the identification and use of information regarding one or more porcine leptin receptor (pLEPR) gene polymorphisms as a marker to identify animals to serve as breeding stock for enhanced pork production. One particular polymorphism of pLEPR gene results in either a methionine or a threonine amino acid residue at position 69 of the protein that the pLEPR genes encodes. The pLEPR gene is located on porcine chromosome 6 and have been shown to be associated with determination of daily feed intake, among other factors.

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